L MASONRY DRILLS AND DRILL HOLDERS—DESCRIPTION AND USE

1. GENERAL

1.01 This section describes the L Masonry Drills which are used in conjunction with the L Masonry Drill Holder for drilling holes in masonry for the anchoring devices that secure the various building attachments associated with drop and block wiring, house and block cables, and underground cables.

1.02 This section is reissued to include the information on the L Masonry Drill Holder formerly contained in Section 081-745-112 which is cancelled. Since this is a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 Each L Drill Holder is furnished with an ejector which facilitates removal of the drill from the holder.

2. PRECAUTIONS

2.01 Special eye protection (Section 081-020-011) must be worn to protect the eyes from flying chips during drilling operations in masonry.

2.02 Do not attempt drilling in explosive atmospheres such as may be found in gassy manholes because of the sparks thrown off by the drilling.

2.03 Protective gloves should be worn to protect the hands from flying particles of metal or masonry caused by the drilling.

2.04 Do not use a drill holder with a badly mushroomed head. Refer to Part 5 to correct this condition.

3. DESCRIPTION

L Drill Holder

3.01 The L Drill Holder is used with L Masonry Drills in the manual drilling of anchor holes in masonry walls or floors.

3.02 The L Drill Holder consists of a length of round tool steel with a tapered socket in one end to accommodate the drill shank and a beveled striking head on the other end. A soft rubber grip is molded around the holder to facilitate holding and turning during the hand drilling operations. An elongated hole located in the socket end is for inserting the ejector to remove the drill from the socket (Fig. 1).

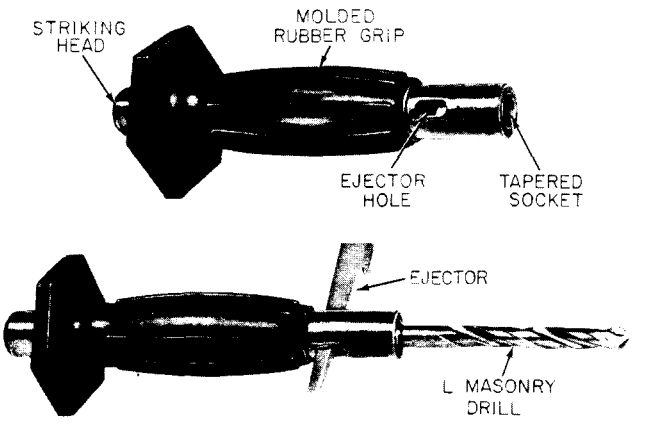

Fig. 1—L Drill Holder

L Masonry Drills

3.03 The L Masonry Drill has a spiral fluting similar to twist drills used for drilling metal. The shank of the drill is tapered to fit the socket of the drill holder (Fig. 2).

3.04 Table A indicates the sizes of L Masonry Drills available for use in the L Drill Holder.

4. USE

4.01 Use only drilling hammers covered in Section 081-745-102 for striking L Drill Holders during hand drilling operations. The large end of the hammer is best suited for striking purposes. When drilling in masonry walls, apply light hammer

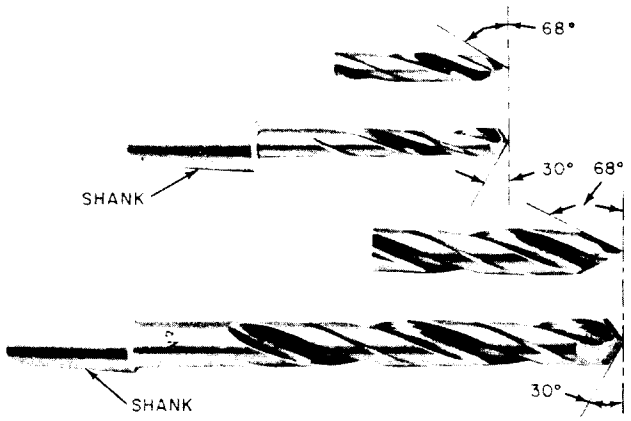

Fig. 2—Masonry Drills

TABLE A — L MASONRY DRILL DIMENSIONS

DRILL SIZE	OVER-ALL LENGTH
3/16"	2-5/8"
1/4" short	3-1/4"
1/4" long	6"
5/16" short	4-1/4"
5/16" long	6"
3/8"	5-1/16"
1/2"	5-9/16"
5/8"	6"

blows and turn drill slightly between blows for best results. This procedure will require less physical effort and results in faster and cleaner hole drilling.

4.02 L Masonry Drills give best results when in good condition. If cutting edges are dull, the drilling will be slow and laborious. Where the cutting edges are not of equal length or the point is off center, the drill will jam and produce a hole larger than the drill size.

4.03 L Masonry Drills clean holes while drilling and upon removal the holes are ready to receive the anchors or expansion shields.

4.04 In drilling masonry walls strike masonry drill holder with light hammer blows. Do not rock the drill but turn it slightly between hammer blows. This drilling procedure requires less physical effort and results in faster and cleaner cutting by the drill. Heavy hammer blows cause drills to jam in holes thereby making it difficult to dislodge.

4.05 To remove an L Masonry Drill from the drill holder, insert the small end of the ejector into the elongated hole at the socket end of the holder so the flat side is in contact with the end of the drill. Push the ejector into the hole until it is seated handtight against the shank of the drill in the socket. A sharp tap with the drilling hammer is usually sufficient to unseat the drill in the socket for easy removal. The point of the drill should be directed downward to prevent accidents in case the drill is ejected too sharply.

5. MAINTENANCE

5.01 Each workman should assume responsibility for the working condition of the drill holder and drills assigned to him.

5.02 The striking head of the L Drill Holder is made purposely softer than the head of the drilling hammer and will therefore spread over or mushroom with continued use. When this occurs, the mushroomed edges may be removed and the striking head redressed on an electric grinder.

Caution: Use special eye protection (2.01) when using an electric grinder.

When through continuous use the mushrooming begins to show signs of cracking, the holder should be considered unsafe for further use and replaced.

5.03 The following defects impair the drilling efficiency of L Masonry Drills:

(a) Dull cutting edges or edges badly nicked.

(b) Cutting edges of unequal length and angle formed with axis of the drill not uniform.

(c) Bent drills.

(d) Broken points.

(e) Diameter reduced by wear to point where drilled hole is too small for anchor.

5.04 Dull or unequal length cutting edges (a) and (b) may be restored to efficiency on an electric grinder. Maintain the same angle, (shown in Fig. 2), on the point as originally sharpened. See ***Caution*** in 5.02 regarding electric grinders. For all other defects (c), (d), and (e) the drills should be replaced in accordance with the locally established routine.

5.05 Store drills and holders in their proper places when not in use.